

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of reducing the effects of second order intermodulation distortion in a zero-IF receiver, comprising: receiving an RF signal, modulating and amplifying the RF signal to provide one or more baseband signals, then detecting an occurrence of intermodulation distortion within the one or more baseband signals, and selectively enabling a wide mode of a wide-notch filter having a predetermined wide mode and a normal mode, said wide mode having a wider frequency range than said normal mode for attenuating signal components of the one or more baseband signals within the predetermined wide mode frequency range of the wide-notch filter to reject the second order intermodulation distortion, wherein detecting the occurrence of intermodulation distortion comprises determining a plurality of signal strength measures, and determining the occurrence of intermodulation distortion based on a relationship among the plurality of signal strength measures, the plurality of signal strength measures comprising an RSSI measure and an Eb/Nt measure, and determining the occurrence of intermodulation distortion if:

Eb/Nt < energy threshold; and

RSSI > minimum signal strength;

and maintaining the wide mode enablement of the filter while either a decrease in RSSI exceeds a predetermined decrease or an increase in the Eb/Nt ratio exceeds a predetermined normal Eb/Nt ratio.

2. (Previously Presented) The method of claim 1, wherein the predetermined wide mode notch-width is approximately +/-60 kHz, and approximately centered at zero-Hertz.

3. (Previously Presented) The method of claim 1, further including detecting a cessation of the intermodulation distortion, and selectively disabling the wide mode of the wide-notch filter, based on the cessation of the intermodulation distortion.

4.-5. (Canceled)

6.-8. (Canceled)

9. (Previously Presented) The method of claim 1, further including disabling the wide mode of the wide-notch filter, based on a duration since enabling the wide mode of the wide-notch filter.

10. (Currently Amended) A receiver comprising: a mixer that is configured to convert a received RF signal to an analog baseband signal, an amplifier to amplify the analog baseband signal, a detector that is configured to assert a detection signal when intermodulation distortion is detected in the amplified analog baseband signal, a wide-notch filter having a predetermined wide mode and a normal mode coupled to an output of the mixer and having an output coupled to an input of the amplifier, said wide mode having a wider frequency range than said normal mode, said filter being operably coupled to the mixer and the detector, the detector configured to activate the wide mode of the wide-notch filter for selectively attenuating second order intermodulation distortion signal components in the analog baseband signal when the detection signal is asserted, and a baseband processor that is configured to receive the analog baseband signal and to provide therefrom a receiver output, wherein the baseband processor further configured to provide digital measures of signal strengths in the analog baseband signal, and the detector operably coupled to the baseband processor and configured to detect the intermodulation distortion in the analog baseband signal based on the digital measures of signal strengths from the baseband processor, the digital measures of signal strengths comprising an RSSI measure and an Eb/Nt measure; and the detector configured to assert the detection signal when:

Eb/Nt < energy threshold; and
RSSI > minimum signal strength;
and to maintain the wide mode enablement of the filter while either a decrease in
RSSI exceeds a predetermined decrease or an increase in the Eb/Nt ratio exceeds a
predetermined normal Eb/Nt ratio.

11. (Previously Presented) The receiver of claim 10, wherein the wide-notch filter is configured to selectively attenuate signal components within approximately +/-60 kHz of zero-Hertz when the detection signal is asserted.

12. (Previously Presented) The receiver of claim 10, wherein the detector is further configured to de-assert the detection signal to activate the normal mode of the wide-notch filter based on a duration since asserting the detection signal.

13-14. (Canceled)

15.-17. (Canceled)

18. (Currently Amended) The receiver of claim-~~17~~10, wherein the baseband processor is further configured to provide the first and second measures of energy to the detector.

19. (Previously Presented) The receiver of claim 10, wherein the received RF signal is a quadrature-modulated signal, and the mixer is configured to provide a pair of quadrature signals that comprise the analog baseband signal.

20. (Previously Presented) The receiver of claim 10, wherein the filter is a digital filter that is included within the baseband processor.

21.-22. (Canceled)